Listing of Claims:

1-3. (Cancelled)

4. (Previously presented) A computer-implemented method for finding an opening in which to fit an order in a schedule, comprising:

computing an amount of free time required in a shift to fit the order by calculating a travel time between a first activity and a second activity, calculating a difference travel time defined as a result of a subtraction of the travel time between the first activity and the second activity and the travel time of the order and the second activity, further calculating a job time defined as the time that the order will take to be performed in the shift, and summing the travel time, difference travel time, and job time;

creating a schedulable time block from a virtual free time block, wherein the schedulable time free block includes a primary block, zero or more expansion blocks, and zero or more load blocks;

examining the primary block, wherein the primary block is a candidate to fit the order if a duration of the primary block, excluding at least one break is greater than or equal to the amount of free time required in the shift to fit the order, where the primary block is not a candidate, computing extra time by relocating assigned orders earlier or later in time in a portion of the shift, the computation of extra time including computing an amount of time that the portion of the shift can be relocated by aggregating a number of virtual free time blocks in the portion of the shift; and

creating at least one opening in the shift from the schedulable time block so as to present to a customer at least one option of fitting the order in the schedule to perform a desired service.

5. (Original) The method of claim 4, further comprising generating a list of shifts from a window defined over a set of shifts of a worker.

6. (Original) The method of claim 5, further comprising generating a list of virtual free time blocks from a shift of a worker.

7-11. (Cancelled)

12. (Previously presented) The method of claim 4, wherein computing an extra time by relocating a portion of the shift includes computing an amount of time that the portion of the shift must be shifted to fit the order, wherein the amount of time that the portion of the shift must be shifted is defined as a result of a subtraction of the amount of free time required in the shift to accommodate the order and a time available in the virtual free time block.

13. (Cancelled)

14. (Previously presented) The method of claim 4, further comprising executing the act of computing the extra time by relocating a portion of the shift to later in time in the shift if the act of examining the primary block determines that the primary block is not a candidate, wherein the primary block is a candidate to fit the order if the extra time plus the duration of the primary block is greater than or equal to the amount of free time required in the shift to fit the order, and updating the at least one expansion block if the primary block is a candidate.

15. (Original) The method of claim 14, further comprising executing the act of computing the extra time by relocating a portion of the shift to earlier in time in the shift if the act of executing the act of computing the extra time by relocating a portion of the shift to later in time and the act of examining the primary block determine that the primary block is not a candidate, executing the act of examining the primary block, wherein the primary block is a candidate to fit the order if the extra time plus the duration of the primary block is greater than or equal to the amount of free time required in the shift to fit the order, and updating the at least one expansion block if the primary block is a candidate.

16. (Original) The method of claim 15, further comprising eliminating the virtual free time block from further consideration if the act of executing the act of computing the extra time by relocating a portion of the shift to earlier in time in the shift and the act of examining the primary block determine that the primary block is not a candidate.

17. (Original) The method of claim 16, further comprising checking a load limit of the shift if the primary block is being expanded by the extra time to fit the order, wherein checking includes adding the amount of free time required in the shift to fit the order to a current load of the shift to define a new load, and wherein checking includes comparing the new load against the load limit.

18. (Original) The method of claim 17, further comprising reducing a total load of the shift by finding at least one virtual free time blocks to be removed, wherein if the act of finding finds at least one virtual free time block to be removed, the act of reducing executes an act of adding the at least one virtual free time block to be removed, and updating the at least one load block if the act of finding finds at least one virtual free time block to be removed.

19. (Original) The method of claim 18, further comprising eliminating the virtual free time block if the act of reducing fails to reduce the total load of the shift to fit the order.

20. (Cancelled)

21. (Cancelled)

22. (Previously presented) A computer-readable medium having instructions stored thereon for causing a computer to perform a method for finding an opening to fit an order in a schedule, the method comprising:

computing an amount of free time required in a shift to fit the order by calculating a travel time between a first activity and a second activity, calculating a difference travel time

defined as a result of a subtraction of the travel time between the first activity and the second activity and the travel time of the order and the second activity, further calculating a job time defined as the time that the order will take to be performed in the shift, and summing the travel time, difference travel time, and job time;

creating a schedulable time block from a virtual free time block, wherein the schedulable time block includes a primary block, at least one expansion block, and at least one load block;

examining the primary block, wherein the primary block is a candidate to fit the order if a duration of the primary block, excluding at least one break is greater than or equal to the amount of free time required in the shift to fit the order, where the primary block is not a candidate, computing extra time by relocating assigned orders earlier or later in time in the shift, the computation of extra time including computing an amount of time that the portion of the shift can be relocated by aggregating a number of virtual free time blocks in the portion of the shift; and

creating at least one opening in the shift from the schedulable time block so as to present a customer with at least one option of fitting the order in the schedule to perform a desired service.

23. (Previously presented) The computer-readable medium of claim 22, further having instructions stored thereon for generating a list of shifts from a window defined over a set of shifts of a worker.

24. (Previously presented) The computer-readable medium of claim 23, further having instructions stored thereon for generating a list of virtual free time blocks from a shift of a worker.

25-29. (Cancelled)

30. (Previously presented) The computer-readable medium of claim 22, wherein the instructions for computing an extra time by relocating a portion of the shift includes

computing an amount of time that the portion of the shift must be shifted to fit the order, wherein the amount of time that the portion of the shift must be relocated is defined as a result of a subtraction of the amount of free time required in the shift to accommodate the order and a time available in the virtual free time block.

31. (Cancelled)

32. (Previously presented) The computer-readable medium of claim 22, further having instructions stored thereon for executing the act of computing the extra time by relocating a portion of the shift to later in time in the shift if the act of examining the primary block determines that the primary block is not a candidate, wherein the primary block is a candidate to fit the order if the extra time plus the duration of the primary block is greater than or equal to the amount of free time required in the shift to fit the order, and updating the at least one expansion block if the primary block is a candidate.

33. (Previously presented) The computer-readable medium of claim 32, further having instructions stored thereon for executing the act of computing the extra time by relocating a portion of the shift to earlier in time in the shift if the act of executing the act of computing the extra time by relocating a portion of the shift to later in time and the act of examining the primary block determine that the primary block is not a candidate, executing the act of examining the primary block, wherein the primary block is a candidate to fit the order if the extra time plus the duration of the primary block is greater than or equal to the amount of free time required in the shift to fit the order, and updating the at least one expansion block if the primary block is a candidate.

34. (Previously presented) The computer-readable medium of claim 33, further having instructions stored thereon for eliminating the virtual free time block from further consideration if the act of executing the act of computing the extra time by relocating a portion of the shift to earlier in time in the shift and the act of examining the primary block determine that the primary block is not a candidate.

35. (Previously presented) The computer-readable medium of claim 22, further having instructions stored thereon for checking a load limit of the shift if the primary block is being expanded by the extra time to fit the order, wherein checking includes adding the amount of free time required in the shift to fit the order to a current load of the shift to define a new load, and wherein checking includes comparing the new load against the load limit.

36. (Previously presented) The computer-readable medium of claim 22, further having instructions stored thereon for reducing a total load of the shift by finding at least one virtual free time blocks to be removed, wherein if the act of finding finds at least one virtual free time block to be removed, the act of reducing executes an act of adding the at least one virtual free time block to be removed, and updating the at least one load block if the act of finding finds at least one virtual free time block to be removed.

37. (Previously presented) The computer-readable medium of claim 22, further having instructions stored thereon for eliminating the virtual free time block if the act of reducing fails to reduce the total load of the shift to fit the order.

38. (Cancelled)

39. (Cancelled)